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 In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

<b>APPLICABLE STANDARD</b>				
RATING	OPERATING TEMPERATURE RANGE	-30°C TO +75°C	STORAGE TEMPERATURE RANGE	-40 °C TO +85 °C
	VOLTAGE	DC 30V MAX / AC 40V MAX	CURRENT	3A MAX

## SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
<b>CONSTRUCTION</b>				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X
<b>ELECTRICAL CHARACTERISTICS</b>				
CONTACT RESISTANCE	10 mA MAX (DC OR 1000 Hz).	30 mΩ MAX.	X	X
INSULATION RESISTANCE	100 V DC.	1000 MΩ MIN.	X	—
VOLTAGE PROOF	250 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X
<b>MECHANICAL CHARACTERISTICS</b>				
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE 19.6 N MAX. WITHDRAWAL FORCE 4 TO 19.6 N.	X	—
MECHANICAL OPERATION	5000 TIMES INSERTIONS AND EXTRACTIONS.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
VIBRATION	FREQUENCY 10 TO 55 Hz SINGLE AMPLITUDE 0.75 mm, ACCELERATION — m/s <sup>2</sup> , AT 2 hours FOR 3 DIRECTIONS.	1) NO ELECTRICAL DISCONTINUITY OF 1 μs. 2) CONTACT RESISTANCE : 50 mΩ MAX. 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
SHOCK	ACCELERATION 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS.			
<b>ENVIRONMENTAL CHARACTERISTICS</b>				
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → -55 TO 35 → +85 → 5 TO 35 °C TIME 30 → 5 → 30 → 5 min. UNDER 5 CYCLES.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) INSULATION RESISTANCE: 1000 MΩ MIN. 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %RH, FOR 96 hours.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) INSULATION RESISTANCE: 10 MΩ MIN. (AFTER DRY.) 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 hours.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) NO SPECTACULAR CORRODE.	X	—
SOLDERING CONDITION (REFLOW)	REFLOW TO THE REFLOW TEMPERATURE PROFILE IN THE FIGURE-1 FOR 2 TIMES.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—

Fig-1 Resistance to Soldering Heat Profile (Connector Surface Temperature)

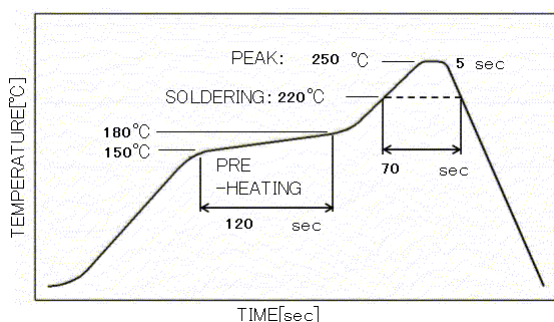
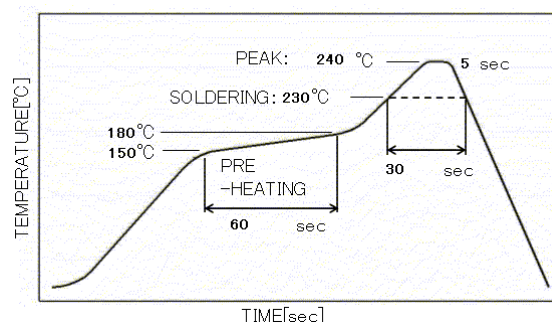


Fig-2 The Recommended Reflow Temperature Profile (Connector Lead Temperature)



COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△ 1	DIS-E-00000496	TS. ITO	NM. NISHIMATSU	16. 03. 08

REMARK	APPROVED	NM. NISHIMATSU	15. 10. 27
	CHECKED	NM. NISHIMATSU	15. 10. 27
	DESIGNED	KN. ICHIKAWA	15. 10. 27
	DRAWN	KN. ICHIKAWA	15. 10. 27

Unless otherwise specified, refer to IEC 60512.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC-120677-30-00
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<b>HRS</b>	SPECIFICATION SHEET	PART NO.	MQ172-3PA (30)
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL206-0950-4-30